| Please type a plus sign (+) inside this box → + | a plus sign (+) inside this box → + |
|---|-------------------------------------|
|---|-------------------------------------|

Sheet

| | Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE |
|--|--|
| Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of | of information unless it contains a valid OMB control number |
| Substitute for form 1449A/PTO | Complete if Kn wn |
| | |

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

11

| | | | | U.S. PATENT DOCU | MENTS | |
|--------------------|--------------|--------------|---------------------------|---|---|--|
| Examiner Initials* | Cite No.1 | US Patent | Document | Name of Patentee or Applicant of Cited Document | Date of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number | Kind Code 2 (if known) | , | | |
| BT. | | 4,613,665 | | Lam | 09-23-1986 | |
| | | 4,810,784 | | Lam | 03-07-1989 | |
| $\neg \neg \neg$ | | 5,100,668 | | Edelman et al. | 03-31-1992 | |
| $\neg \neg \neg$ | | 5,504,001 | | Foster | 04-02-1996 | |
| | | 5,561,982 | | Tunkel et al | 10-08-1996 | |
| | | 5,693,341 | | Schroeder et al. | 12-01-1997 | |
| | | 6,331,422 | | Hubbell, et al. | 12-18-2001 | |
| | | | | | | |
| - | | } | | | | |
| 丰 | | | | | | |
| | | | | | | |
| | | | | | | |

| | | FOREIGN PATENT DOCUMENTS | | | | | | | | |
|----------------|---|--------------------------|-------------------------|----------|--|---|---|----------|--|--|
| Exam Initia | | Cite No.1 | Foreign Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM- DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |] In | | |
| } | | 8 | Office.3 | Number | Kind Code ³ (if known) | | | | | |
| | | | wo | 89/00051 | | Cytrx Biopool Ltd. | 01-12-1989 | | | |
| | | | wo | 90/05177 | | Syntro Corporation | 05-17-1990 | | | |
| | | | wo | 92/22312 | | Jonas Wadstrom | 12-23-1992 | | | |
| | П | | wo | 95/05396 | | Zymogenetics, Inc. | 02-23-1995 | | | |
| | | | wo | 95/23611 | | Protein Polymer Technologies, Inc. | 09-08-1995 | <u>-</u> | | |
| \Box | | | | | | | | | | |

| <u> </u> | | | |
|----------------------|--------------------|--------------------------------|--|
| Examine Signature | /Leon Lankford Jr/ | Date Considered 07 / 24 / 2006 | |

^{*}EXAMINER: tritial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant to place a check mark here if English language

| Substitute for | form 1449A | VPTO | C | ompl te if Kn wn |
|----------------|------------|------------------------------|------------------------|---------------------------|
| STATI | EMENT | N DISCLOSURE BY APPLICANT | Applicati n Number | Continuati n f 10/024,918 |
| (use | as many si | eets as necessary) | Filing Date | August 27, 2003 |
| | | | First Named Inventor | Jeffrey Hubbell |
| | | | Group Art Unit | |
| | | | Examiner Name | |
| | | | Attorney Docket Number | CIT 2606 CIP CON |

| | | OTHER ART NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the | T² | | | |
|-------------------------|--|--|----|--|--|--|
| Examiner's Initials* | Cite No. Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the articl | | | | | |
| BL | | ADAMS, et al., "Roles of ephrinB ligands and EphB receptors in cardiovascular development: demarcation of arterial/venous domains, vascular morphogenesis, and sprouting angiogenesis," Genes & Development 13:295-306 (1999). | | | | |
| | | BAUMGARTNER, et al., "Constitutive expression of phVEGF ₁₆₅ after intramuscular gene transfer promotes collateral vessel development in patients with critical limb ischemia," Circulation 97:1114-1123 (1998). | | | | |
| | | BESSON, et al., "Synthetic Peptide Substrates for a Conductimetric Assay of Pseudomonas aeruginosa Elastase," Analytical BioChemistry, Article No. 0232, 237:216-223 (1996). | | | | |
| | | BLAESS, et al., "Structural analysis of the sixth immunoglobulin-like domain of mouse neural cell adhesion molecule L1 and its interactions with $\alpha_{\nu}\beta_{0}$, α llb β_{0} , and α 5 β_{1} integrins," <i>J Neurochem</i> 71:2615-2625 (1998). | | | | |
| | | BORRAJO, et al., "Derivatized Cyclodextrins as Peptidomimetics: Influence on Neurite Growth," <i>Bioorganic and Medicinal Chemistry Letters</i> 7(9):1185-1190 (1997). | | | | |
| | | BRUCKNER, "EphrinB ligands recruit GRIP family PDZ adaptor proteins into raft membrane microdomains," Neuron 22:511-524 (1999). | | | | |
| | | BROOKS, et al., "Requirement of vascular integrin α,β ₃ for angiogenesis," <i>Science</i> 264:569-571 (1994). | | | | |
| | | CALDERWOOD, et al., "Integrins and actin filaments: reciprocal regulation of cell adhesion and signaling," <i>J Biol Chem</i> 275:22607-22610 (2000). | | | | |
| | | CAMARATA, et al., "Sustained Release of Nerve Growth Factor from Biodegradable Polymer Microspheres," <i>Neurosurgery</i> 30(3) 313-319 (1992). | | | | |
| | | CARDIN, et al., "Molecular Modeling of Protein-Glycosaminoglycan Interactions," Arteriosclerosis 9:21-32 (1989). | | | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

/Leon Lankford Jr/

Date Considered

07/24/2006

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

077043/00009

+

Examiners

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁸ Applicant to place a check mark here if English tanguage

| | Substitute fo | r form 144 | 9A/PTO | Co | omplete if Kn wn |
|-------|---------------|------------|---|------------------------|---------------------------|
| | STAT | EMENT | ON DISCLOSURE BY APPLICANT sheets as necessary) | Applicati n Numb r | Continuation / 10/024,918 |
| ł | , | • | •• | Filing Date | August 27, 2003 |
| 1 | | | | First Named Inventor | Jeffrey Hubbell |
| ł | | | | Group Art Unit | |
| | | | | Examiner Name | |
| Sheet | 3 | of | 11 | Attorney Docket Number | CIT 2606 CIP CON |

| | | OTHER ART - NON PATENT LITERATURE DOCUMENTS | |
|-------------------------|--------------------------|--|----|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T* |
| BL | | CONOVER, et al., "Disruption of Eph/ephrin signaling affects migration and proliferation in the adult subventricular zone," Nature Neuroscience 3(11):1091-3324 (2000). | |
| | | COOMBS, et al., "Directing Sequence-specific Proteolysis to New Targets," <i>Journal of Biological Chemistry</i> 273(8):4323-4328 (1998). | |
| | | DALVA, et al., "EphB receptors interact with NMDA receptors and regulate excitatory synapse formulation," Cell 103:945-956 (2000). | |
| | | DEDHAR & HANNIGAN, "Integrin cytoplasmic interactions and bidirectional transmembrane signaling," Current Opinion in Cell Biology 8:657-669 (1996). | |
| | | DIMILLA, et al., "Mathematical model for the effects of adhesion and mechanics on cell migration speed," <i>Biophysical Journal</i> 60:15-37(1991). | |
| | | DINBERGS, et al., *Cellular Response to Transforming Growth factor-β1 and Basic Fibroblast Growth factor Depends on release Kinetics and Extracellular Matrix Interactions,* <i>Journal of Biological Chemistry</i> 271(47):29822-29829 (1996). | |
| | | DOWNS, et al., "Calcium Alginate Beads as a Slow-Release System for Delivering Angiogenic Molecules in Vivo and In Vitro," Journal of Cellular Physiology 152:422-429 (1992). | |
| | | EDELMAN, et al., "Basic Fibroblast Growth Factor Enhances the Coupling of Intimal Hyperplasia and Proliferation of Vasa Vasorum in Injured Rat Arteries," <i>The American Society for Clinical Investigation, Inc.</i> 89:465-473 (1992). | |
| | | EDELMAN, et al., "Controlled and modulated release of basic fibroblast growth factor," Biomaterials 12:619-626 (1991). | |
| $\overline{\mathbf{V}}$ | | EDELMAN, et al., "Perivascular and intravenous administration of basic fibroblast growth factor: Vascular and solid organ deposition," <i>Proc. Natl. Acad. Sci USA</i> 90:1513-1517 (1993). | |

| Examiner's Signature | /Leon Lankford Jr/ | Date Considered 07/24/2006 |
|-------------------------|--------------------|----------------------------|

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief-Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

| Please type a plus sign (+) inside this box → | \Box | |
|---|--------|--|
| | Ш | |

PTO/SB/88A (10-98
Approved for use through 10/31/99. OMB/0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

| Under the Paperwork Reduction Act of 1995, no persons are required to respons Substitute for form 1449A/PTO | | omplit if Known | |
|---|------------------------|----------------------------|------------|
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | 1 | Continuation of 10/024,918 | returnir m |
| (use as many sines as necessary) | Filing Date | August 27, 2003 | |
| | First Named Inventor | Jeffrey Hubbell | |
| | Group Art Unit | | |
| | Examiner Name | | |
| Sheet 4 of 11 | Attorney Docket Number | CIT 2606 CIP CON | |

| | OTHER ART - NON PATENT LITERATURE DOCUMENTS | | | | | |
|--------------------------------|---|--|---|--|--|--|
| Examiner's Cite Initials* No.1 | | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-Issue number(s), publisher, city and/or country where published | T | | | |
| BL | | EDGAR, et al., "The heparin-binding domain of laminin is responsible for its effects on nuerite outgrowth and neuronal survival," <i>EMBO Journal</i> 3(7):1483-1488 (1984). | | | | |
| | | ELICEIRI & CHERESH, "The role of αν integrins during anglogenesis: insights into potential mechanisms of action and clinical development," <i>Journal of Clinical Investigation</i> 103:1227-1230 (1999). | | | | |
| | | FASOL, et al., "Experimental use of a modified fibrin glue to induce site-directed angiogenesis from the aorta to the heart," Journal of Thoracic and Cardiovascular Surgery 107:1432-9 (1994). | | | | |
| | | FELDING-HABERMANN, et al., "A single immunoglobulin-like domain of the human neural cell adhesion molecule L1 supports adhesion by multiple and platelet integrins," <i>J Cell Biol</i> 139:1567-1581 (1997). | | | | |
| | | FENG, et al., "Roles for ephrins in positionally selective synaptogenesis between motor neurons and muscle fibers," <i>Neuron</i> 25:295-306 (2000). | | | | |
| | | FERRARA & ALITALO, "Clinical applications of angiogenic growth factors and their inhibitors," <i>Nature Medicine</i> 5:1359-1364 (1999). | | | | |
| | | FERRARA, "Molecular and biological properties of vascular endothelial growth factor," J Mol Med 77:527-543 (1999). | | | | |
| | | FOLKMAN, "Angiogenesis in cancer, vascular, rheumatoid and other disease," Nature Medicine 1:27-31 (1995). | | | | |
| | | GALE, et al., "Ephrin-B2 selectivity marks arterial vessels and neovascularization sites in the adult, with expression in both endothelial and smooth-muscle cells," <i>Developmental Biology</i> 230:151-160 (2001). | | | | |
| V | | GÖTZ, et al., "Neurotrophin-6 is a new member of the nerve growth factor family," Letter to Nature 372:266-269(1994). | | | | |

| Examiner's | | Date Considered |
|--------------|---------------------|-----------------|
| LAGITITICI 3 | / > C > - / | 0 7 /0 4 /0 0 0 |
| Cianatura | /Leon Lankford Jr/ | 1 1 07/24/2006 |
| Signature | / Deon Danklold Ol/ | 07/24/2000 |
| | | |

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁸ Applicant to place a check mark here if English language Translation is attached.

| • | - | • |
|---|---|---|
| | | |

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449A/PTO C mplet If Kn wn Continuati n f 10/024,918 Applicati n Number **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT (use as many sheets as necessary) August 27, 2003 Filing Date First Named Inventor Jeffrey Hubbell Group Art Unit **Examiner Name** CIT 2606 CIP CON Attorney Docket Number 11 Sheet of

| Examiner's Cite | | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the | T |
|-----------------|--|---|---|
| Initials* | | item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | |
| BL | | GRIESLER, et al., "Enhanced endothelial of expanded polyethrafluoroethylene grafts by fibroblast growth factor type 1 pretreatment," Surgery 112:244-255 (1992). | |
| | | HALL, "Molecular properties of fibrin-based matrices for promotion of anglogenesis in vitro," <i>Microvascular Research</i> 62:315-326 (2001). | |
| | | HALL, et al., "Trimerization of cell adhesion molecule L1 mimics clustered L1 expression on the cell surface: Influence on L1-Ligand interactions and on promotion of neurite outgrowth," <i>J of Neurochemistry</i> 75:336-346 (2000). | |
| | | HAMMOND, et al., "Management of coronary artery disease: Therapeutic options in patients with diabetes," <i>JACC</i> 36:355-65 (2000). | |
| | | HARADA, et al., "Basic Fibroblast Growth Factor Improves Myocardial Function in chronically Ischemic Porcine Hearts," The American Society for Clinical Investigation, Inc. 94:623-630 (1994). | |
| | | HATA, et al., "Binding of Lipoprotein Lipase to Heparin," Journal of Biological Chemistry 268(12):8447-8457 (1993). | _ |
| | | HAUGEN, et al., "Central and Peripheral Neurite Outgrowth Differs in Preference for Heparin-Binding versus Integrin-Binding Sequences," <i>Journal of Neuroscience</i> 12(6)2034-2042 (1992). | |
| | | HERBERT, et al., "Effects of fibrin micromorphology on neurite growth from dorsal root ganglia cultured in three-dimensional fibrin gels," Journal Biomed Mater Res. 40:551-559 (1998). | |
| | | HERBERT, et al., "Effects of Fibrinolysis on Neurite Growth From Dorsal Root Ganglia Cultured in Two- and Three- Dimensional Fibrin Gels," <i>The Journal of Comparative Neurology</i> 365:380-391 (1996). | |
| \ | | HOULE & JOHNSON, "Nerve growth factor (NGF)-treated nitrocellulose enhances and directs the regeneration of adult rat dorsal root axons through intraspinal neural tissue transplants," Neuroscience Letters 103:17-23 (1989). | |

| Examiner's | / 1.5 1 - / | Date Considered | 07/24/2006 |
|------------|--------------------|-----------------|------------|
| | /Leon Lankford Jr/ | | 07/24/2006 |
| Signature | , | | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

| | ٠ | |
|---|---|--|
| - | • | |
| | | |

| Substitute fo | r form 1449. | WPTO | Co | emplete if Kn wn |
|---------------|--------------|---|----------------------|---------------------------|
| STATI | EMENT | N DISCLOSURE BY APPLICANT heets as necessary) | Application Number | Continuati n f 10/024,918 |
| • | | | Filing Date | August 27, 2003 |
| | | | First Named Inventor | Jeffrey Hubbell |
| | | | Group Art Unit | |
| | | | | |
| | | | Examiner Name | |

| | OTHER ART NON PATENT LITERATURE DOCUMENTS | | | | |
|--|---|--|----------------|--|--|
| Examiner's Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ₃ | | |
| BL | | HUBBELL, "Bioactive biomaterials," Curr Opin Biotech 10:123-129 (1999). | | | |
| | | HUMPHRIES, "Integrin activation: the link between ligand binding and signal transduction," Curr Opin Cell Biol 8:632-640 (1996). | | | |
| | | ILAN, et al., "Distinct signal transduction pathways are utilized during the tube formation and survival phases of in vitro anglogenesis," <i>J of Cell Science</i> 111:3621-3631 (1998). | | | |
| | | INGER & FOLKMAN, "How does extracellular matrix control capillary morphogenesis?" Cell 58:803-805 (1989). | | | |
| | | KALLAPUR, et al., "The Neural Cell Adhesion Molecule (NCAM) Heparin Binding Domain Binds to Cell Surface Heparan Sulfate Proteogylcans," Journal of Neuroscience Research 33:538-548 (1992). | | | |
| | | KANEDA, et al., "Midkine, a Heparin-Binding Growth/Differentiation Factor, Exhibits Nerve Cell Adhesion and Guidance for Neurite Outgrowth in Vitro," <i>Journal of Biochemistry</i> 119:1150-1156 (1996). | | | |
| | | KANG, et al., "Selective stimulation of endothelial cell proliferation with inhibition of smooth muscle cell proliferation by fibroblast growth factor-1 plus heparin delivered from glue suspensions," Surgery 118:280-287 (1995). | | | |
| | | KIGUCHI, et al., "Altered Expression of Epidermal Growth factor Receptor Ligands in Tumor Promoter-Treated Mouse Epidermis and in Primary Mouse Skin Tumors Induced by an Initiation-Promotion Protocol," <i>Molecular Carcinogenesis</i> 22:73-83 (1998). | | | |
| | | KINOSAKI, et al., "Identification of heparin-binding stretches of a naturally occurring deleted variant of hepatocyte growth factor (dHGF)," Biochemical Biophysica Acta 1384:93-102(1998). | | | |
| V | | KLEINMAN, et al., "The Laminins: A Family of Basement Membrane Glycoproteins Important in Cell Differentiation and Tumor Metastases," Vitamins and Hormones 47:161-186 (1993). | | | |

| Examiner's | /Leon Lankford Jr/ | Date Considered | 07/24/2006 |
|------------|---------------------|-----------------|------------|
| Signature | / Heon Danktord 01/ | | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

| 1 |
|---|
| |
| |

| Under the F | eperwork Reduc | ston Act of | 1995, n | o persons are required | to respond to | a collection of information unless it contains a v | etila OMB control number |
|-------------|----------------|-------------|---------|------------------------|---------------|--|----------------------------|
| | Substitute (| | | | | | complet If Kn wn |
| | STAT | TEME | NT | N DISCLOS BY APPLIC | ANT | Application Number | Continuation of 10/024,918 |
| 1 | ,- | | , | | •• | Filing Date | August 27, 2003 |
| | | | | | | First Named Inventor | Jeffrey Hubbell |
| 1 | | | | | | Group Art Unit | |
| | | | | | | Examiner Name | |
| Sheet | 7 | 7 | of | 11 | | Attorney Docket Number | CIT 2606 CIP CON |

| | | OTHER ART NON PATENT LITERATURE DOCUMENTS | | | | | | |
|-------------------------|--|--|-----------|--|--|--|--|--|
| Examiner's Cite No.1 | | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-Issue number(s), publisher, city and/or country where published | | | | | | |
| BL | | LEE, et al., "Analysis of affinity and structural selectivity in the binding of proteins to glycosaminoglycans: Development of a sensitive electrophoretic approach," <i>Biochemistry</i> 88:2768-2772 (1991). | | | | | | |
| | | LIN, et al., "Purification and Initial Characterization of Rat B49 Glial Cell Line-Derived Neurotrophic Factor," <i>Journal of Neurochemistry</i> 758-768 (1994). | | | | | | |
| | | LOPEZ, et al., "Basic Fibroblast Growth Factor in a Porcine Model of Chronic Myocardial Ischemia: A Comparison of Angiographic, Echocardiographic and Coronary Flow Parameters," <i>The Journal of Pharmacology and Experimental Therapeutics</i> 282(1):385-390 (1996). | | | | | | |
| | | LOPEZ, et al., "Short Communication, Local Perivascular Administration of Basic Fibroblast Growth Factor: Drug Delivery and Toxicological Evaluation," <i>Drug Metabolism and Disposition</i> 24(8):922-924 (1995). | | | | | | |
| | | LORSORDO, et al., "Gene therapy for myocardial anglogenesis. Initial clinical results with direct myocardial injection of phVEGF ₁₆₅ as sole therapy for myocardial ischemia," <i>Circulation</i> 98:2800-2804 (1998). | | | | | | |
| | | LYON, et al., "The Interaction of the Transforming Growth Factor-βs with Heparin/Heparan Sulfate is Isoform-specific," The Journal of Biological Chemistry 272(29):18000-18006 (1997). | | | | | | |
| | | MARTIN, "Laminin and Other Basement Membrane Components," Annual Review of Cellular Biology 3:57-85 (1987). | | | | | | |
| | | MASSIA, et al., "An RGD Spacing of 440 nm is Sufficient for Integrin Ol3-mediated Fibroblast Spreading and 140 nm for Focal contact and Stress Fiber Formation," The Journal of Cell Biology 114(5):1089-110 (1991). | | | | | | |
| | | MAYSINGER, et al., "Microencapsulated nerve growth factor: effects on the forebrain neurons following devascularizing cortical lesions," Neuroscience Letters 140:71-74 (1992). | | | | | | |
| $\overline{\mathbf{V}}$ | | MCCAFFREY, et al., "Transforming Growth Factor-β1 is a Heparin-Binding Protein: Identification of Putative Heparin- Binding Regions and Isolation of Heparins with Varying Affinity for TGF-β1," <i>Journal of Cellular Physiology</i> 152:430-440 (1992). | | | | | | |

| ızxamıners | / / | [Date Considered] | 07/24/2006 |
|------------|--------------------|-------------------|------------|
| Signature | /Leon Lankford Jr/ | | |
| | | | |

Inate Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁵ Applicant to place a check mark here it English language Translation is attached.

| • | |
|---|---|
| ٠ | - |

| Nada a da a D | annual Cad eller | - A 100E | | e an maind to moved | o a collection of information unless it contains a valid CMB control number | | | |
|---------------|------------------|----------|------|---------------------------------------|---|----------------------------|--|--|
| Under the P | Substitute for | | | a and rectinged to resident r | | omplete if Kn wn | | |
| | STATE | MENT | BY | SCLOSURE APPLICANT s necessary) | Application Number | Continuation of 10/024,918 | | |
| Ì | (000 | as many | 0000 | | Filing Date | August 27, 2003 | | |
| | | | | | First Named Inventor | Jeffrey Hubbell | | |
| } | | | | | Group Art Unit | | | |
| | | | | | Examiner Name | | | |
| Sheet | 8 | of | T | 11 | Attorney Docket Number | CIT 2608 CIP CON | | |

| | | OTHER ART - NON PATENT LITERATURE DOCUMENTS | - - | | | | | | |
|-----------------------|--|---|----------------|--|--|--|--|--|--|
| Examiner's Cite No. 1 | | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | | | | | | | |
| BL | | MONTGOMERY, et al., "Human neural cell adhesion molecule L1 and Rat homologue NILE are ligands for integrin $\alpha_r \beta_n$ " J Cell Biol 132:475-485 (1996). | | | | | | | |
| | | NEHLS & HERRMANN, "The configuration of fibrin clots determine capillary morphogenesis and endothelial cell migration," Microvascular Research 51:347-364 (1996). | | | | | | | |
| | | NETZEL-ARNETT, et al., "Sequence Specificities of Human Fibroblast and Neutropil Collagenases," Journal of Biological Chemistry 266(11):6747-6755 (1991). | | | | | | | |
| | | NOLO, et al., "Developmentally Regulated Neurite Outgrowth Response from Dorsal root Ganglion Neurons to Heparin- binding Growth-associated Molecule (HB-GAM) and the expression of HB-GAM ion the Targents of the Developing Dorsal Root Ganglion Neurites," <i>European Journal of Neuroscience</i> 8:1658-1665 (1996). | | | | | | | |
| | | PEPPER, et al., "Angiogenesis: a paradigm for balanced extracellular proteolysis cell migration and morphogenesis," Enzyme Protein 49:138-162 (1996). | | | | | | | |
| | | POWELL, et al., "Controlled Release of nerve growth factor from a polymeric implant," Brain Research 515:309-311 (1990). | | | | | | | |
| | | PRESTA, et al., "Structure-Function Relationship of Basic Fibroblast Growth Factor: Site-Directed Mutagenesis of a Putative Heparin-Binding and Receptor-Binding Region," <i>Biochemical and Biophysical Research Communications</i> 185(3):1098-1107 (1992). | | | | | | | |
| | | REDDI, "Role of Morphogenetic Proteins in Skeletal Tissue Engineering and Regeneration," Nature Biotechnology 16:247- 252 (1998). | | | | | | | |
| | | ROGERS, et al., "Neuron-Specific Interactions with Two Neurite-Promoting Fragments of Fibronectin," Journal of Neuroscience 5(2):369-378 (1985). | | | | | | | |
| V | | ROSENGART, et al., "Angiogenesis Gene Therapy. Phase I assessment of direct intramyocardial administration of an adenovirus expressing phVEGF ₁₆₅ cDNA to individuals with clinically significant severe coronary artery disease," Circulation 100:468-474 (1999). | | | | | | | |

| Examiner's / Signature | Leon | Lankford | Jr/ | Date Consk | dered 0.7 | /24/2006 | |
|---------------------------|------|----------|-----|------------|-----------|----------|--|
| Signature | | | | | | 124/2000 | |

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

| | 1 | ı | |
|--|---|---|--|
| | | L | |
| | | | |

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449A/PTO Complete If Kn wn Continuati n f 10/024,918 Applicati n Number INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) August 27, 2003 Filing Date Jeffrey Hubbell First Named Inventor Group Art Unit Examiner Name Attorney Docket Number CIT 2606 CIP CON 11 Sheet of

| | | OTHER ART NON PATENT LITERATURE DOCUMENTS | T² | | | | | |
|-------------------------|--------------------------|---|----|--|--|--|--|--|
| xaminer's Initials* | Cite No. ¹ | | | | | | | |
| BL | | RUOSLAHTI & ENGVALL, "Perspectives series: Cell adhesion in vascular biology," J Clin Invest 99:1149-1152 (1997). | | | | | | |
| ĺ | | SAKATA & AOKI, et al., "Cross-linking of α_z -plasmin inhibitor to fibrin by fibrin-stabilizing factor," <i>J Clin Invest</i> 65:290-297 (1980). | | | | | | |
| | | SAKIYAMA, et al., "Incorporation of heparin-binding peptides into fibrin gels enhances neurite extension: an example of designer matrices in tissue engineering," | | | | | | |
| | | SAKIYAMA-ELBERT & HUBBELL, "Development of Fibrin Derivatives for Controlled Release of Heparin-Binding Growth Factors," Journal of Controlled Release 65:389-402 (2000). | | | | | | |
| | | SCHENSE & HUBBELL, "Cross-Linking Exogenous Bifunctional Peptides into Fibrin Gels with Factor XIIIa," <i>Bioconjugate Chemistry</i> 10(1):75-81 (1999). | | | | | | |
| | | SCHENSE, et al., "Enzymatic incorporation of bioactive peptides into fibrin matrices enhances neurite extension," Nature Biotechnology 18:415-419 (2000). | | | | | | |
| | | SCHROEDER-TEFFT et al., "Collagen and heparin matrices for growth factor delivery," Journal of Controlled Release 49:291-298 (1997). | | | | | | |
| | | SELLKE, et al, "Enhances endothelium-dependent relaxation of the collateral-perfused coronary microcirculation," Basic FGF H1303-1311 (1994). | | | | | | |
| | | SHIN, et al., "Expression of EphrinB2 identifies a stable genetic difference between arterial and venous vascular smooth muscle as well as endothelial cells, and of adult neovascularization," Developmental Biology 230:139-150 (2001). | | | | | | |
| $\overline{\mathbf{V}}$ | | SHIREMAN, et al., "Modulation of vascular cell growth by local cytokine delivery from fibrin glue suspendions," J Vasc Surg 19:852-62 (1999). | | | | | | |

| Examiner's Signature | /Leon Lankford Jr/ | Date Considered | 07/24/2006 | |
|-------------------------|--------------------|-----------------|------------|--|
| Digitatura | | | | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

| | _ |
|--|---|
| | |

are required to respond to a collection of information unless it contains a valid OMB control number

| | Substitute for | form 1449A/P | то | Complet if Kn wn | | | |
|-------|----------------|--------------|--|------------------------|---------------------------|--|--|
| | STATE | MENT B | DISCLOSURE Y APPLICANT Its as necessary) | Application Number | Continuati n f 10/024,918 | | |
| | (000) | do many one | ,, | Filing Date | August 27, 2003 | | |
| | | | | First Named Inventor | Jeffrey Hubbell | | |
| | | | | Group Art Unit | | | |
| | | | | Examiner Name | | | |
| Sheet | 10 | of | 11 | Attorney Docket Number | CIT 2608 CIP CON | | |

| | | OTHER ART NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the | T |
|----------------------|--|--|---|
| Examiner's Cite No.1 | | include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the international file of the article (when appropriate), title of the article (when appropriate), and the article (when appropriate), title of the article (when appropriate), title of the article (when appropriate), and the arti | |
| BL | | SHUMACHER, et al., "Induction of neoanglogenesis in ischemic myocardium by human growth factors," <i>Circulation</i> 97:645-650 (1998). | |
| | | SMITH, et al., "Rapid Identification of Highly Active and Selective Substrates for Stromelysin and Matrilysis Using Bacteriophage Peptide Display Libraries," <i>Journal of Biological Chemistry</i> 270(12):6440-6449 (1995). | |
| | | SPILLMAN, et al., "Defining the Interleukin-8-Binding Domain of Heparan Sulfate," <i>Journal of Biological Chemistry</i> 273(25):15487-15493 (1998). | |
| | | STEFFEN, et al., "Characterization of Cell-Associated and Soluble Forms of Connective Tissue Growth Factor (CTFG) Produced by Fibroblast Cells In Vitro," Growth Factors 15:199-213 (1998). | |
| | | STEIN, et al., "Eph receptors discriminate specific ligand oligomers to determine alternative signaling complexes, attachment, and assembly responses," <i>Genes & Development</i> 12:667-678 (1998). | |
| | | STUDIER, et al., "Use of T7 RNA Polymers to Direct expression of Cloned Genes," Methods in Enzymology 185:60-89 (1990). | |
| | | TAKAGI, et al., "Arnino Acid Sequence Studies on the Chain of Human Fibrinogen. Location of Four Plasmin Attack Points and a Covalent cross-linking Site," <i>Biochemistry</i> 14(23):5149-5156 (1975). | |
| | | TAKESHITA, et al., "Therapeutic Angiogenesis. A single intraarterial bolus of vascular endothelial growth factor augments revascularization in a rabbit ischemic hind limb model," J Clin Invest 93:662-670 (1994). | |
| | | TASHIRO, et al., "A Synthetic Peptide containing the IKVAV Sequence from the A Chain of Laminin Mediates Cell Attachment, Migration, and Neurite Outgrowth," <i>Journal of Biological Chemistry</i> 264(27):16174-16182 (1989). | |
| \ | | TESSLER, et al., "Heparin Modulates the Interaction of VEGF 165 with Soluble and Cell Associated fik-1 Receptors," Journal of Biological Chemistry 269(17):12456-12461 (1994). | |

| Examiner's Signature | /Leon Lankford Jr/ | Date Considered 07/24/2006 |
|-------------------------|--------------------|----------------------------|
| Signature | • | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as Indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

| Please type a plus sign (+) inside this bo | x → |
|--|-----|
|--|-----|

Sheet

| PTO/SB/08A (10-96 |
|--|
| Approved for use through 10/31/99. OMB 0651-0031 |
| Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE |

CIT 2606 CIP CON

| | | Patent and Trademark Office: U.S. DEPARTMENT OF CL |
|---|--|--|
| apenwork Reduction Act of 1995, no persons are required to respond to | a collection of information unless it contains a | ralid OMB control number |
| Substitute for form 1449A/PTO | | Complit if Kn wn |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | Applicati n Number | Continuati n f 10/024,918 |
| (use as many sheets as necessary) | Filing Date | August 27, 2003 |
| • | First Named Inventor | Jeffrey Hubbell |
| | Group Art Unit | |
| | Examiner Name | |

Attorney Docket Number

11

| THOMPSON, et al., "Site-directed neovessel formation in vivo," Science 241:1349-1352 (1988). |
|--|
| HOWIFSON, et al., Site-directed heavesses formation in the |
| TYLER-CROSS, et al., "Heparin binding domain peptides of antithrombin III: Analysis by isothermal titration calorimetry and circular dichroism spectroscopy," <i>Protein Science</i> 3:620-627 (1994). |
| WANG, et al., "Molecular distinction and angiogenesis interaction between embryonic arteries and veins revealed by ephrin- B2 and its receptor Eph-B4," <i>Cell</i> 93:741-753 (1998). |
| WEATHERFORD, et al., "Vascular endothelial growth factor and heparin in a biologic glue promotes human aortic endothelial cell proliferation with aortic smooth muscle cell inhibition," Surgery 433-439 (1996). |
| YAMADA, "Adhesive Recognition Sequences," The Journal of Biological Chemistry 266(20):12809-12812 (1991). |
| YANISH-PERRON, et al., "Improved M13 phage cloning vectors and host strains: nucleotide sequences of the M13mp18 and pUC19 vectors," <i>Gene</i> 33:103-119 (1985). |
| ZUCKER, et al., "Platelet Factor 4: Production, Structure, and Physiologic and Immunologic Action," <i>Proceedings for the Society of Experimental Biology and Medicine</i> 198:693-702 (1991). |
| |
| |
| |

| | | In a Considered | |
|-----------|--------------------|-----------------|------------|
| Examiners | /Toom Tombford Tm/ | Date Considered | 07/24/2006 |
| | /Leon Lankford Jr/ | | 01/21/2000 |
| Signature | | | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

| | | ľ | |
|--|--|---|--|

| Substitute for form 1449A/PTO | Complete if Known | | | |
|--|------------------------|-----------------------|--|--|
| (use as many sheets as necessary) | Application Number | 10/650,509 | | |
| | Filing Date | August 27, 2003 | | |
| TO T | First Named Inventor | Jeffrey Hubbell | | |
| THAT I SHAPE TO SHAPE THE SHAPE TO SHAPE THE S | Group Art Unit | 1651 | | |
| | Examiner Name | Leon B. Lankford, Jr. | | |
| Shoot 1 of 3 | Attorney Docket Number | CIT 2606 CIP CON | | |

| Examiner Initials* | Cite No.1 | US Patent Document | Name of Patentee or Applicant of Cited Document | Date of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|-----------------------|--------------|---|--|-----------------------------------|--|
| | | Number Kind Code ² (if known) | | | |
| _BL | | 5,171,670 | Kronenberg, et al. | 12-15-1992 | |
| | | 5,202,247 | Kilburn, et al. | 04-13-1993 | |
| | | 5,428,014 | Labroo, et al. | 06-27-1995 | |
| | | 5,582,862 | Reed | 12-10-1996 | |
| | | 5,641,670 | Tunkel, et al. | 06-24-1997 | |
| | | 5,773,577 | Capello | 05-30-1998 | |
| | | 5,840,837 | Krstenansky, et al. | 11-24-1998 | |
| П | | 5,877,153 | Harris, et al. | 03-02-1999 | |
| | | 5,958,874 | Clark, et al. | 09-28-1999 | |
| | | 6,054,122 | MacPhee, et al. | 04-25-2000 | |
| | | 6,117,425 | MacPhee, et al. | 09-12-2000 | |
| | | 6,136,564 | Kopetzki, et al. | 10-24-2000 | |
| | | 6,197,325 | MacPhee, et al. | 03-06-2001 | |
| | | 6,559,119 | Burgess, et al. | 05-06-2003 | |
| | | | | | |
| $\Box\Box$ | | | | | |
| | | | FOREIGN PATENT DOC | UMENTS | |

| | FOREIGN PATENT DOCUMENTS | | | | | | | | |
|--------------------|--------------------------|---|--|---|---|-----------------------------------|----------------|------------|--|
| Examin Initials | | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM- DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | Ť⁵ | | | |
| | | o | ffice.3 | Number ⁴ | Kind Code ⁵ (if known) | | | | |
| | | D | E | 200 10 297 | | ETH Zurich & University of Zurich | 08-31-2000 | | |
| | | P | СТ | WO 92/02620 | | Regeneron Pharmaceuticals | 02-20-1992 | | |
| | | Р | CT | WO 92/09301 | | The American Red Cross | 06-11-1992 | | |
| Examine | | | | /Leon Lank | ford Jr | / D _i | ate Considered | 07/24/2006 | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Assistant Commission for Patent, Washington, DC 20231.

Signature

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

| | 1 | 1 | |
|--|---|---|--|
| | | ۰ | |
| | | | |

| , | Substitute fo | r form 1449. | A/PTO | Complete if Known | | |
|-------|---------------|--------------|--|------------------------|-----------------------|--|
| | | ATEME | TION DISCLOSURE NT BY APPLICANT ny sheets as necessary) | Application Number | 10/650,509 | |
| | | • | • | Filing Date | August 27, 2003 | |
| | | | | First Named Inventor | Jeffrey Hubbell | |
| | | | | Group Art Unit | 1651 | |
| | | | | Examiner Name | Leon B. Lankford, Jr. | |
| Sheet | | of | 3 | Attorney Docket Number | CIT 2606 CIP CON | |

| U.S. PATENT DOCUMENTS | | | | | | | | |
|-----------------------|--------------------|--------------------|------------------|---|---|---|--|--|
| Cite No. | US Patent Document | | ment | Name of Patentee or Applicant of Cited Document | Date of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | | |
| | Number | | | | | | | |
| | | | | | | | | |
| | | · | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | 7 | | | | | |
| | | | | | | | | |
| | - | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | No.¹ | Cite No.¹ US Pater | No.1 Number Kind | No.¹ | Cite US Patent Document Name of Patentee or Applicant of Cited Document Number Kind Code 2 | Cite US Patent Document Name of Patentee or Applicant Document No. No. Number Kind Code Name of Patentee or Applicant Document Document MM-DD-YYYY | | |

| | | | • | F | OREIGN PATENT DOCUMEN | TS | | \neg |
|-------------------------|--------------|---------|----------------------|--------------------------------------|--|---|------------|----------------|
| Examiner Initials* | Cite No.1 | | Foreign Patent Docum | ent | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM- DD-YYYY | | L _s |
| | | Office. | Number ^a | Kind Code ⁵ (if known) | | | | |
| BL | | PCT | WO 94/20133 | | The American Red Cross | 09-15-1994 | | |
| | | PCT | WO 96/17633 | | The American Red Cross | 06-13-1996 | | |
| | | PCT | WO 00/64481 . | | ETH Zurich & University | 11-02-2000 | | |
| | | PCT | WO 03/040235 | | Universitaet Zuerich and Eidgenoessisch Technische Hockschule Zuerich | 05-15-2003 | | |
| Examiner's Signature | | /Le | on Lankford | Jr/ | Da | te Considered | 07/24/2006 | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

| Please type a plus sign (+) inside this box - | |
|---|--|
|---|--|

| PTO/SB/08A (10-96 |
|--|
| Approved for use through 10/31/89. OMB 0651-0031 |
| Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE |

| Under the F | Paperwork Reduction Substitute for | | | tion of information unless it contains a valid OMB control number Complete if Known | | | |
|-------------|---------------------------------------|-------------|--|--|-----------------------|---|--|
| | STA | TEME | TION DISCLOSURE NT BY APPLICANT iny sheets as necessary) | Application Number | 10/650,509 | • | |
| | | 1030 83 116 | illy shood as hooessary) | Filing Date | August 27, 2003 | | |
| | | | | First Named Inventor | Jeffrey Hubbell | _ | |
| 1 | | | • | Group Art Unit | 1651 | | |
| | | | | Examiner Name | Leon B. Lankford, Jr. | | |
| Sheet | 3 | of | 3 | Attorney Docket Number | CIT 2606 CIP CON | | |

| | | OTHER ART - NON PATENT LITERATURE DOCUMENTS | | | | |
|------------------------|--|--|---------|--|--|--|
| xaminer's Initials* | Cite No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T | | | |
| BL | GRAINGER, et al., "Poly(dimethylsiloxane)-poly(ethylene oxide)-heparin block copolymers. Synthesis and characterization" <i>J. Biomed. Mater. Res.</i> 22(3):231-249 (1988). | | | | | |
| | | LUGINBUEHL, et al., "Localized delivery of growth factors for bone repair" European Journal of Pharmaceutics and Biopharmaceutics 58:197-209 (2004). | | | | |
| | | RIXON, et al., "Do the non-catalytic polysaccharlde-binding domains and linker regions enhance the biobleaching properties of modular xylanases?" <i>Appl. Microbiol. Biotechnol.</i> 46(5-6):514-520 (1996). | | | | |
| | | SAKIYAMA-ELBERT and HUBBELL, "Controlled release of nerve growth factor from a heparin-containing fibrin-based cell ingrowth matrix" <i>Journal of Controlled Release</i> 69:149-158 (2000). | | | | |
| | | SAKIYAMA-ELBERT, et al., "Development of growth factor fusion proteins for cell-triggered drug delivery" FASEB J. 15:1300-1302 (2001). | | | | |
| | | SEIBEL, et al., "Transfection of mitochondria: strategy towards a gene therapy of mitochondrial DNA diseases" <i>Nucleic Acids Res.</i> 23(1):10-17 (1995). | | | | |
| | | ZISCH, et al., "Covalently conjugated VEGF-fibrin matrices for endothelialization" Journal of Controlled Release 72:101-113 (2001). | | | | |
| • | | | | | | |
| | | | \perp | | | |
| | | | | | | |

| | | | <u></u> |
|-------------------------|--------------------|-----------------|------------|
| Examiner's Signature | /Leon Lankford Jr/ | Date Considered | 07/24/2006 |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant to place a check mark here if English language